

## COVID-19 New Jersey County by County Hospital Bed Demand versus Supply

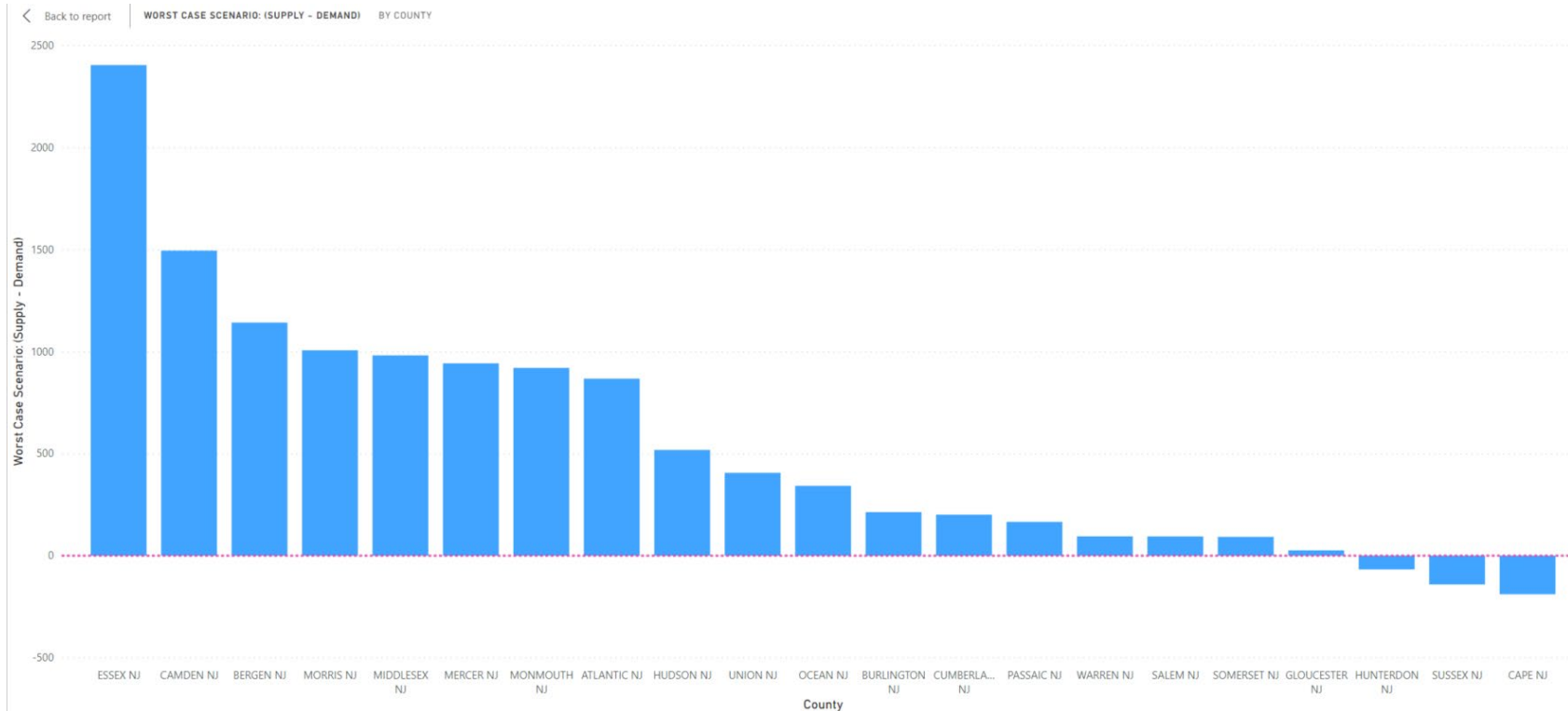


Fig 1: The above figure shows Supply minus Demand at peak using the Imperial-College-COVID19-NPI-modelling-16-03-2020 and the exponential regression model in the article published. All appearing above the red dashed line have capacity even at peak. All Counties that at or falling below the red line are will not be able to meet demand. In this scenario, peak will hit mid-May. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Some Counties will have capacity to redirect to needed areas.

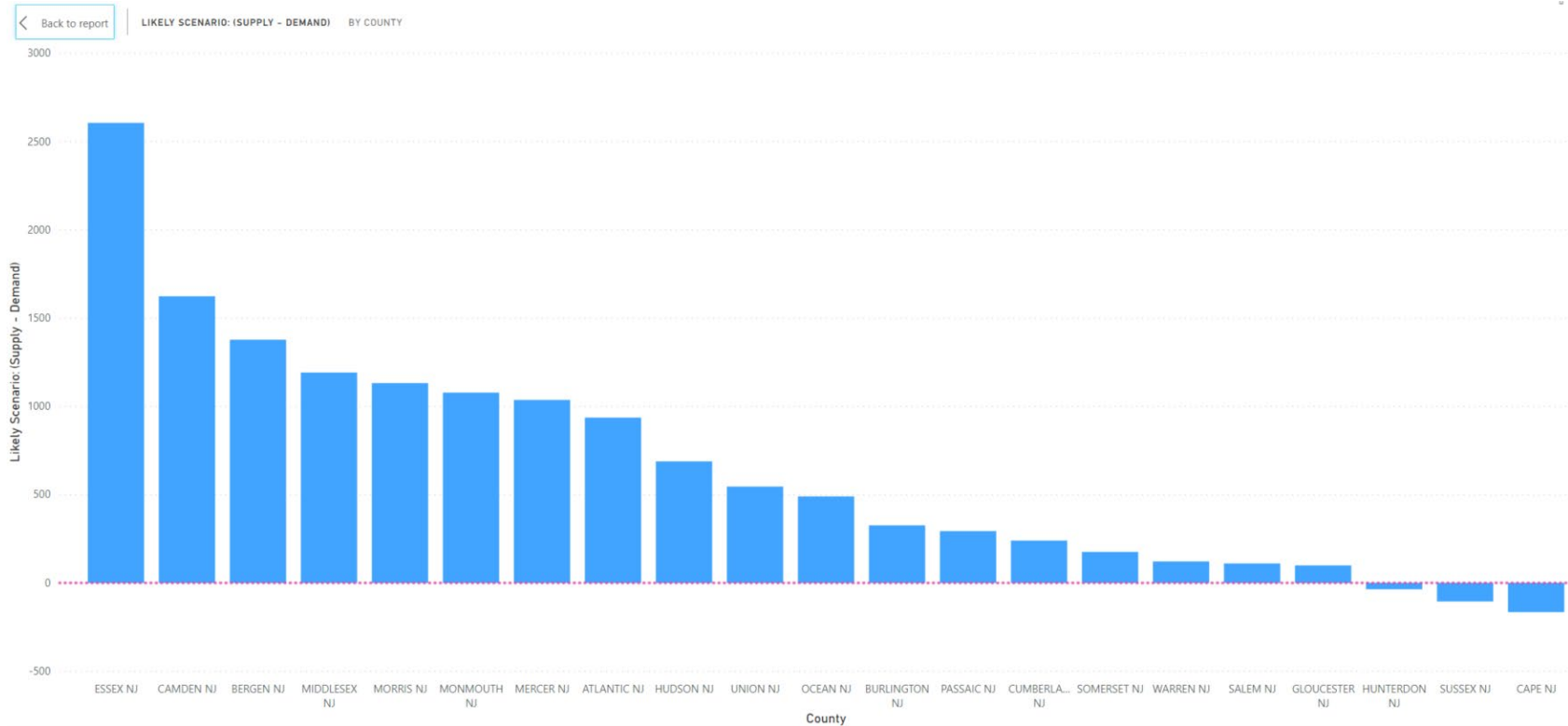


Fig 2: In the more likely scenario where some precautions are taken to flatten the curve, data suggests some Counties will still be unable to meet the needed demand. The peak will hit in early June. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Some Counties will have capacity to redirect to needed areas.

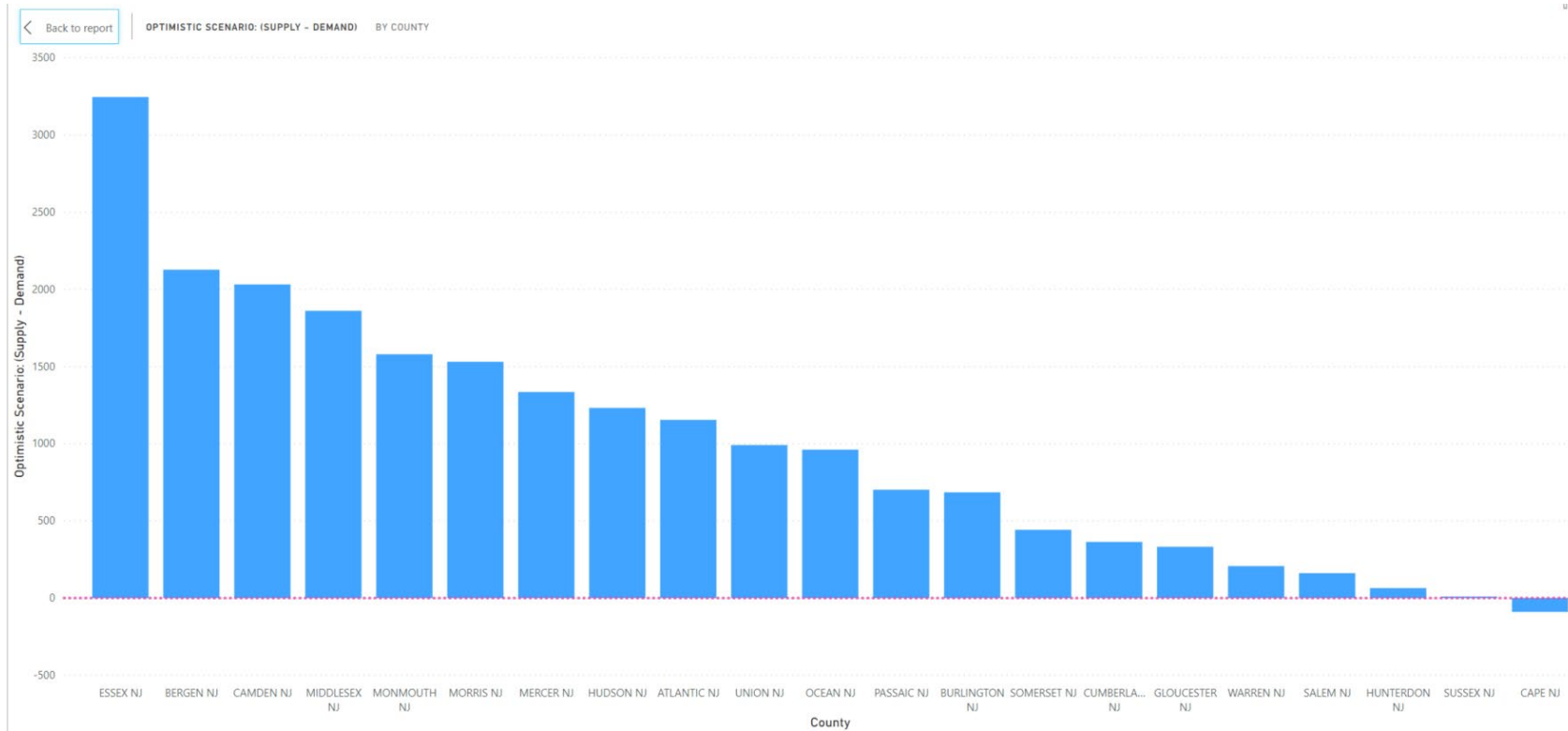


Fig 3: In the scenario where all precautions are taken to flatten the curve, data suggests almost all Counties will be able to meet the needed demand. The peak will hit in June. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Several Counties will have capacity to redirect to needed areas.

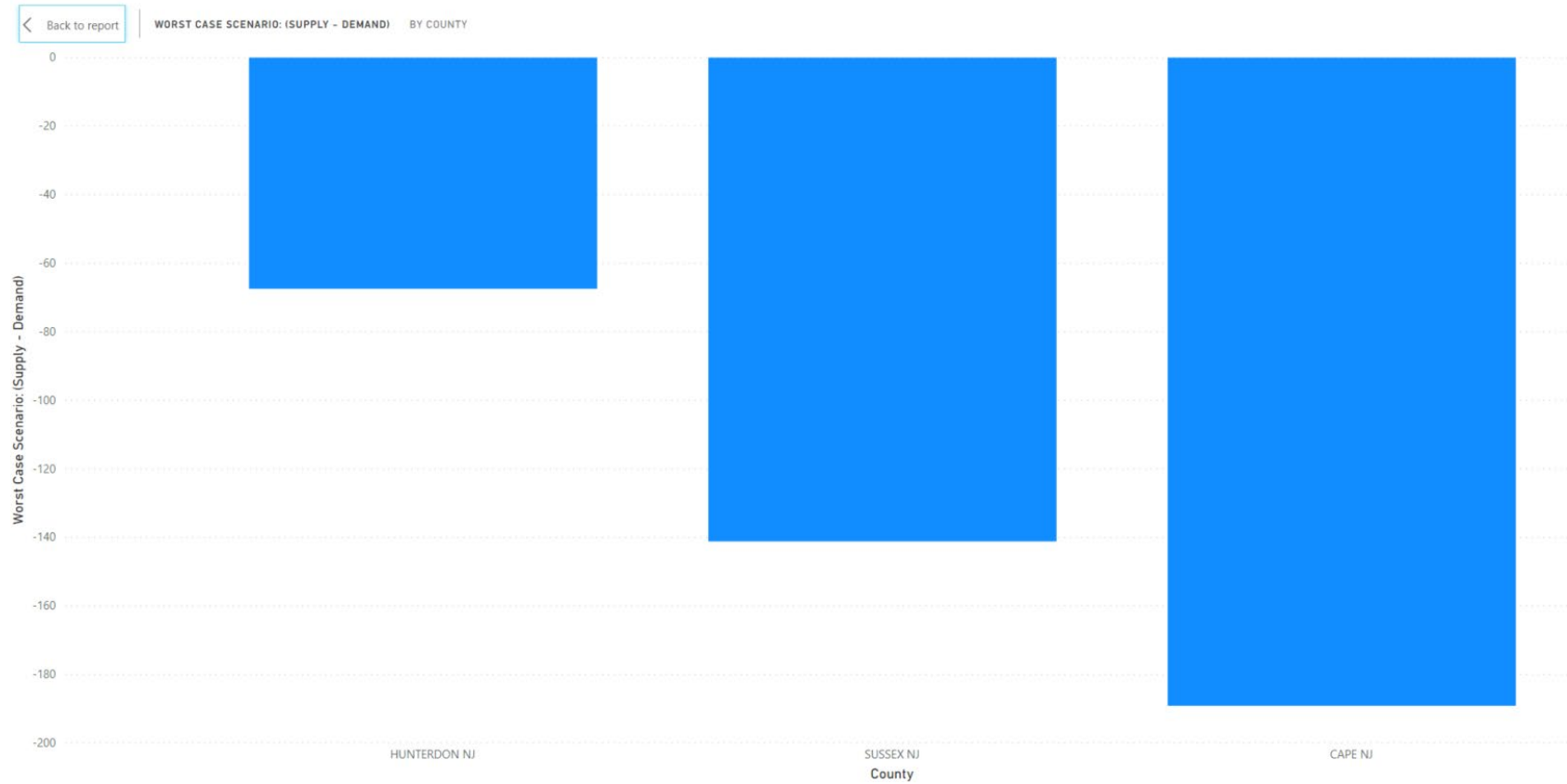


Fig 4: The figure above represents Counties that will run out of beds at peak for the Worst-Case scenario

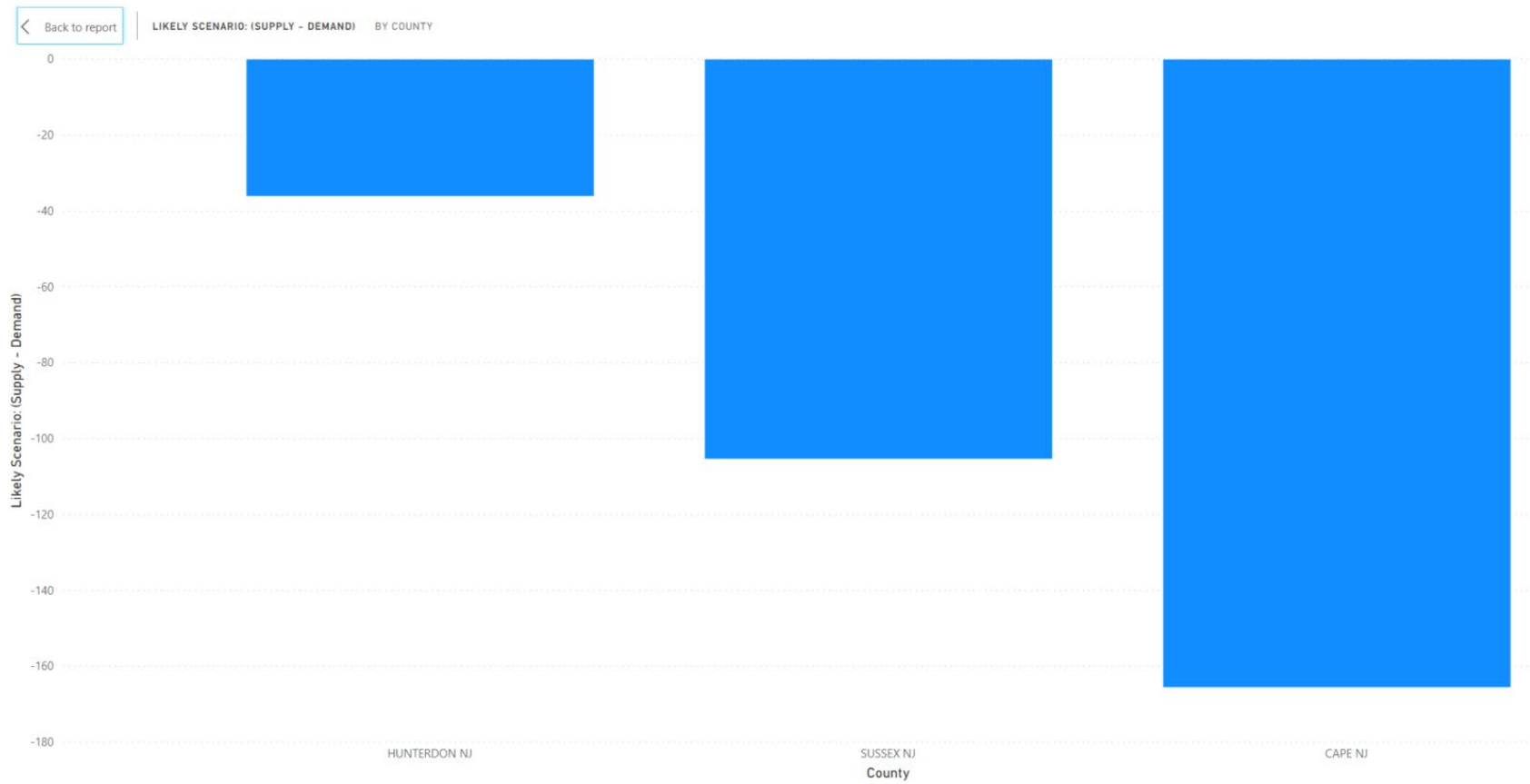


Fig 5: The figure above represents Counties that will run out of beds at peak for the Likely scenario

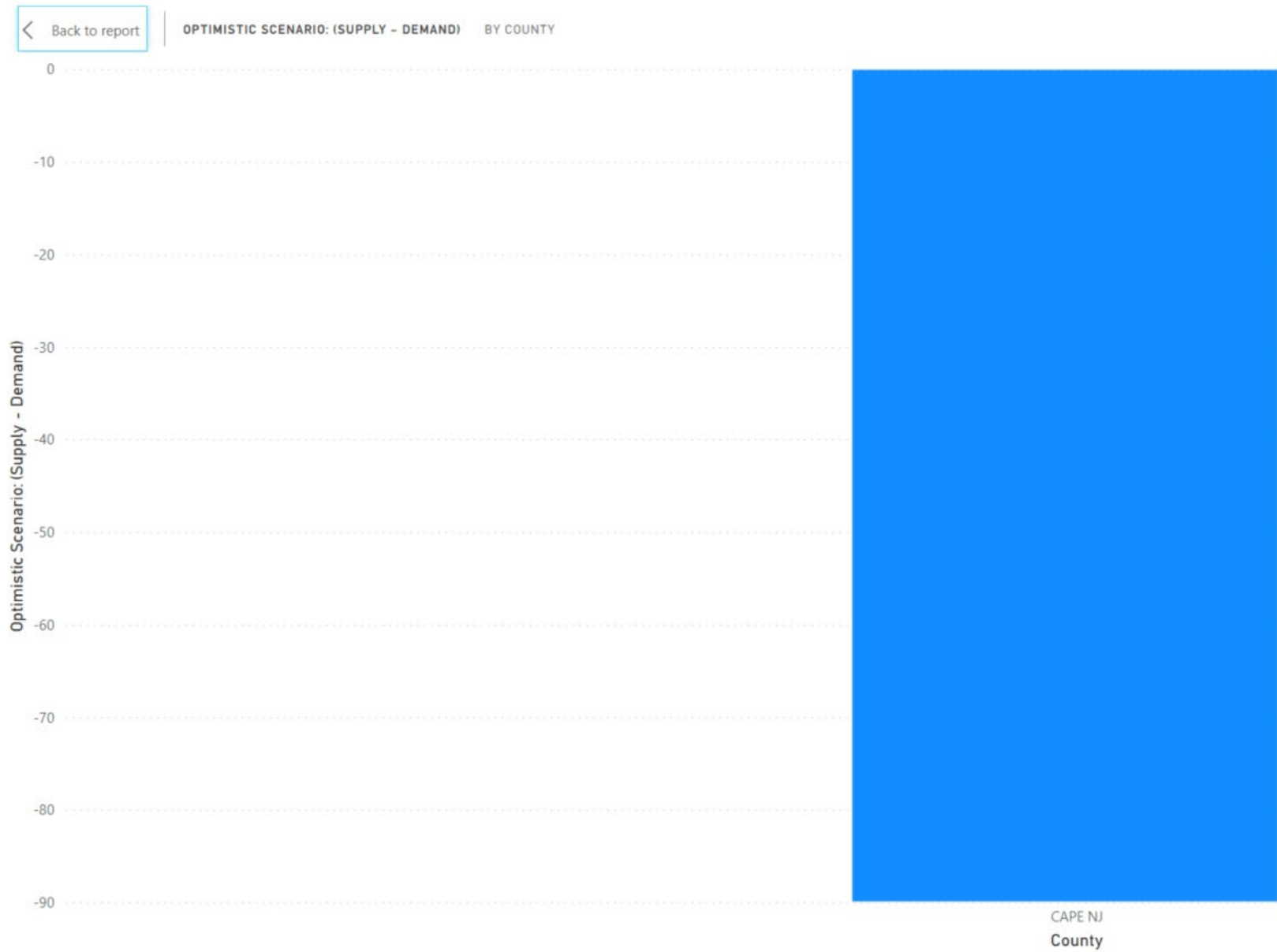


Fig 6: The figure above represents Counties that will run out of beds or do not have a hospital at peak for the Optimistic scenario

County	State	Total Population	65+ Population	Beds	With Full Precautions - Optimistic Scenario of needed Demand for Hospital Beds								With Some Precautions - Likely Scenario of needed Demand for Hospital Beds				With No Precautions - Worst Case Scenario of needed Demand for Hospital Beds				Counties to run out of beds (all precautions - Optimistic)	Counties to run out of beds (some precautions - Likely)	Counties to run out of beds (no precautions - Worstcase)	
					O-April	O-May	O-June	O-Mid-June	O-July	O-August	L-Apr	L-May	L-June	L-July	L-August	W-April	W-May	Mid-May	W-June	W-July				W-August
ATLANTIC NJ	NJ	272926	57002	1414	27	27	246	259	136	27	27	136	478	136	27	27	273	751	546	41	27			
BERGEN NJ	NJ	937920	186924	3019	94	94	844	891	469	94	94	469	1641	469	94	94	938	2579	1876	141	94			
BURLINGTON NJ	NJ	449192	88673	1112	45	45	404	427	225	45	45	225	786	225	45	45	449	1235	898	67	45			x
CAMDEN NJ	NJ	510996	93806	2518	51	51	460	485	255	51	51	255	894	255	51	51	511	1405	1022	77	51			
CAPE NJ	NJ	94549	29092	0	9	9	85	90	47	9	9	47	165	47	9	9	95	260	189	14	9	x	x	x
CUMBERLAND NJ	NJ	154952	27040	511	15	15	139	147	77	15	15	77	271	77	15	15	155	426	310	23	15			
ESSEX NJ	NJ	800401	131548	4007	80	80	720	760	400	80	80	400	1401	400	80	80	800	2201	1601	120	80			
GLOUCESTER NJ	NJ	291372	55300	609	29	29	262	277	146	29	29	146	510	146	29	29	291	801	583	44	29			x
HUDSON NJ	NJ	679756	100262	1878	68	68	612	646	340	68	68	340	1190	340	68	68	680	1869	1360	102	68			
HUNTERDON NJ	NJ	125717	27772	184	13	13	113	119	63	13	13	63	220	63	13	13	126	346	251	19	13		x	x
MERCER NJ	NJ	373362	67327	1690	37	37	336	355	187	37	37	187	653	187	37	37	373	1027	747	56	37			
MIDDLESEX NJ	NJ	837288	147228	2657	84	84	754	795	419	84	84	419	1465	419	84	84	837	2303	1675	126	84			
MONMOUTH NJ	NJ	627551	127248	2176	63	63	565	596	314	63	63	314	1098	314	63	63	628	1726	1255	94	63			
MORRIS NJ	NJ	498847	98475	2005	50	50	449	474	249	50	50	249	873	249	50	50	499	1372	998	75	50			
OCEAN NJ	NJ	589699	146589	1522	59	59	531	560	295	59	59	295	1032	295	59	59	590	1622	1179	88	59			x
PASSAIC NJ	NJ	510563	88505	1187	51	51	460	485	255	51	51	255	893	255	51	51	511	1404	1021	77	51			x
SALEM NJ	NJ	63776	13949	222	6	6	57	61	32	6	6	32	112	32	6	6	64	175	128	10	6			
SOMERSET NJ	NJ	333316	60623	759	33	33	300	317	167	33	33	167	583	167	33	33	333	917	667	50	33			x
SUSSEX NJ	NJ	143570	30330	146	14	14	129	136	72	14	14	72	251	72	14	14	144	395	287	22	14		x	x
UNION NJ	NJ	557320	94344	1521	56	56	502	529	279	56	56	279	975	279	56	56	557	1533	1115	84	56			x
WARREN NJ	NJ	107088	21825	309	11	11	96	102	54	11	11	54	187	54	11	11	107	294	214	16	11			

Table 1: Table with Data showing all three scenarios